



March 31, 2017

BY ELECTRONIC FILING

Marlene H. Dortch
Secretary
Federal Communications Commission
445 12th Street, S.W.
Washington, D.C. 20554

Re: *Spectrum Bands Above 24 GHz et. al.*, GN Docket No. 14-177, IB Docket No. 15-256, WT Docket No. 10-112, and IB Docket No. 97-95 and *Connect America Fund II Report and Order and Order on Reconsideration*, FCC 17-12; WC Docket No. 10-90; WC Docket No. 14-58

Dear Ms. Dortch:

On March 30, 2017, EchoStar Satellite Operating Corporation and Hughes Network Systems, LLC (“Hughes”, and collectively “EchoStar”) met with Chairman Ajit Pai and acting wireline advisor, Jay Schwarz, to discuss EchoStar’s proposals and concerns in the above-referenced proceedings. EchoStar was represented by Pradman Kaul, President and CEO of Hughes; Dean A. Manson, Executive Vice President, General Counsel, and Secretary; and Jennifer A. Manner, Senior Vice President, Regulatory Affairs.

In the meeting EchoStar presented the attached talking points, highlighting areas where the decisions in the above-referenced proceedings will hamper the ability of satellite service providers to deliver broadband services to consumers through the United States. The talking points were distributed to the attendees.

Pursuant to the Commission’s rules, this notice is being filed in the above-referenced dockets for inclusion in the public record. Please contact me should you have any questions.

Respectfully submitted,

/s/ Jennifer A. Manner

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Attachment
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BROADBAND SATELLITE SERVICES ARE A KEY PART OF BRIDGING THE DIGITAL DIVIDE

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- EchoStar, a U.S.-based company, is the largest U.S. commercial operator of geostationary satellites and through its subsidiary, Hughes Network Systems, LLC (Hughes), is the largest satellite broadband provider throughout North America, serving over one million users, including those in rural, remote, and tribal areas.
- Earlier this month, Hughes began providing commercial service from EchoStar XIX, the world's highest throughput satellite. It provides broadband-defined speeds of 25/3 mbps for residential users and 55/5 mbps for enterprise users throughout the continental United States and southern Alaska. With the addition of EchoStar XIX, EchoStar is now able to offer more than double the capacity of its previous two-satellite configuration and deliver the highest quality broadband services to Americans, wherever they live.

The Commission needs to revisit its Spectrum Frontiers decision in the 28 GHz and 37/39 GHz bands in order to enable the most efficient use of spectrum resources and ensure that Americans are able to have access broadband services, no matter where they are located.

- In the *Spectrum Frontiers* proceeding, the Commission has sought to create “rules that will enable flexibility in the uses and technologies that might be deployed in [the above 24 GHz] bands in a way that promotes coexistence between [the] different users and technologies.”¹
- However, the rules adopted in that proceeding fail to strike an appropriate balance between terrestrial and satellite spectrum sharing, and result in arbitrary limitations on the deployment of individually-licensed earth stations that could negatively impact satellite broadband service across the United States.
 - For example, under those rules, only four of the seventeen 28 GHz earth stations Hughes deployed for communication with EchoStar XIX would meet the new siting requirements. One of the seventeen includes an earth station on the outskirts of North Platte, Nebraska, which has a contour covering a population of zero people, but that overlaps a road running through miles of uninhabited farmland and classified as an “urban minor arterial road.”
- EchoStar has joined a group of Satellite Broadband Companies² to propose a fair and reasonable alternative framework for earth station siting in the 28 GHz and 37/39 GHz band, which would ensure that both 5G and satellite broadband operators are able to respond to consumer demands.
 1. Adoption of a tiered population coverage limit, under which FSS earth stations in the 28 GHz and 39 GHz bands could cover no more than 0.2% of the population in the most densely populated license areas; a fixed population limit in the low and medium density population

¹ *Spectrum Frontiers* Notice of Proposed Rule Making, GN Docket No. 14-177 et. al., (Oct. 23, 2015), at ¶ 2.

² EchoStar Satellite Operating Corporation, Hughes Network Systems, LLC, Inmarsat, Inc., The Boeing Company, Intelsat Corp., O3b Ltd., SES Americom, Inc., and WorldVu Satellites Ltd. d/b/a OneWeb (“the Satellite Broadband Companies”).

- areas; and a 10% (for 28 GHz) and 5% (for 39 GHz) population coverage limit in the most sparsely populated areas;
2. Creation of more precise definitions for transient population areas that reflect actual areas of interest to terrestrial operators;
 3. Deletion of the three earth stations per county (28 GHz) or Partial Economic Area (39 GHz) rule as unnecessary; and
 4. Creation of a database to provide a streamlined mechanism for FSS operators to identify areas of minimal terrestrial deployment for use by earth stations.
- Adoption of such an approach will provide satellite operators with the flexibility they need to site their individually-licensed earth stations to best meet consumer demands.

The Commission has repeatedly said that it wants the CAF Phase II auction “to be a competitive auction where every bidder has the opportunity to exert competitive pressure on all other bidders,”³ but it adopted excessively high speed and latency weighting factors that will effectively preclude satellite broadband providers from competing in the auction.

- The FCC should reconsider its CAF order, which lacked any analysis on the impact of different weighting levels on bidders’ abilities to bid. In fact, the Order’s approach of picking the mid-range of the proposals in the record is only superficially fair. The actual impact is that satellite providers will not be able to compete in the auction.
- As shown in our Feb. 14, 2017 ex parte, based on existing offerings in the market, satellite broadband providers will require a subsidy in the range of \$185/month to offer a CAF-compliant package.⁴
- Under the Order’s weighting system, in an area with a \$200 reserve price, a satellite bid in the Baseline Tier (25/3) would have to be \$140 less than a fiber bid in the Gigabit Tier in order to *tie*. In other words, if the fiber bid at \$200, satellite would have to bid \$60 to tie and \$59 to win (well below the \$185/mo in support satellite will need to provide a CAF-compliant offering).
- Thus, the Order’s assertion, for example, that its 25-point penalty for latency will create a scenario where a Gigabit bid “will not necessarily win”⁵ is simply false.
- In fact, the approach that the FCC has adopted is neither technology neutral nor cost-effective. Failure to reconsider this order will result in fewer Americans gaining access to broadband services.

³ Connect America Fund II Report and Order and Order on Reconsideration (FCC 17-12) WC Docket No. 10-90; WC Docket No. 14-58 (CAF II R&O), at ¶ 21.

⁴ This is based on the cost of providing service by Hughes. ViaSat claims that EchoStar’s data “does not apply to” it, but ViaSat’s standard price just for a 30 GB/mo plan is \$159/mo at 25 Mbps. (ViaSat does not publicize a price for its “Freedom” 150 GB/mo package, and only sells Freedom in low-demand areas.).

⁵ CAF II R&O at ¶ 33.